Work Order ID 66595

Tuesday, February 22, 2011 1:27:45 PM

Item ID: D3186-4 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Spacepod Door, RH

Start Date: 2/22/2011 **Start Qty:** 1.00 **Cust Item ID:**

Required Date: 2/25/2011 **Req'd Qty:** 1.00 **Customer:**

Reference:

Approvals: **Process Plan:** H **Date:** 11-02-22 **Tooling:** _____ **Date:** _____ **Run Start** **Stop**

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3186	Rev E								
100		0.00							
Small Fab	Small Fab								
Small Fab	**Memo**	0.00				JT	11-04-05		
	1-Trim door to fit spacepod before drill holes and cut out slots for latch as per dwg D3186 (D3186-4 detail)								
110	QC5- Inspect part completeness to step on W/O	0.00							
QC		S 11/04/05							
Quality Control	**Memo**	0.00				(K)			
120	Identify as per dwg & Stock Location: composites	0.00							
Packaging									
Packaging	**Memo**	0.00				JT	11-04-05		

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Work Order ID 66595

Tuesday, February 22, 2011 1:27:45 PM

Item ID: D3186-4
Revision ID:
Item Name: Spacepod Door, RH
Start Date: 2/22/2011 **Start Qty:** 1.00
Required Date: 2/25/2011 **Req'd Qty:** 1.00
Reference:

Accept **Setup Start** **Stop**

Cust Item ID:
Customer:

Run Start **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC21- Final Inspection - Work Order Release	0.00						11/4/5	
QC	**Memo**	0.00							
Quality Control									

11.04.05

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Picklist Print

Tuesday, February 22, 2011 1:27:52 PM

Work Order ID: 66595

Parent Item: D3186-4

Parent Item Name: Spacepod Door, RH

Start Date: 2/22/2011 **Required Date:** 2/25/2011

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP Rev:A New Issue 07-01-11 EC
IPP rev.B revD 07.03.07 ec IPP Rev:C
10-08-11 added trim door before drilling DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3186-2M SPACEPOD DOOR RH		Manufactured	No		66594	100	Each	0.0000	1	1	RT	11-04-04	

Dart Aerospace Ltd

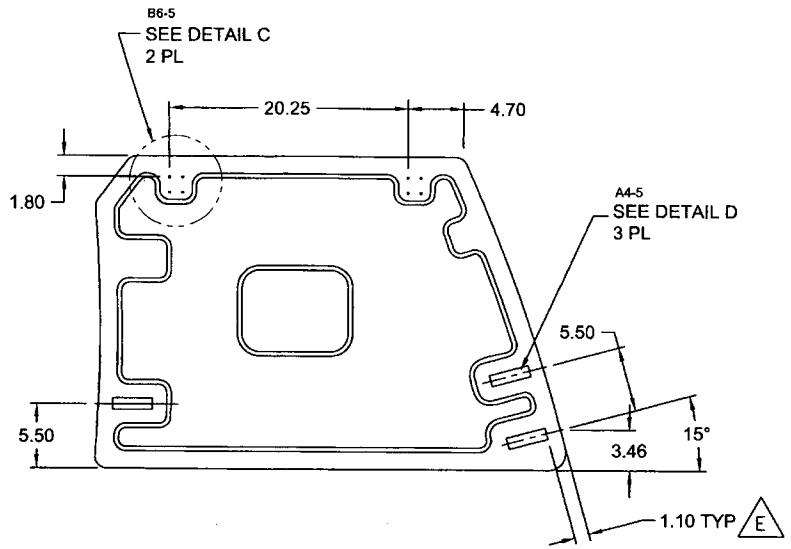
W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

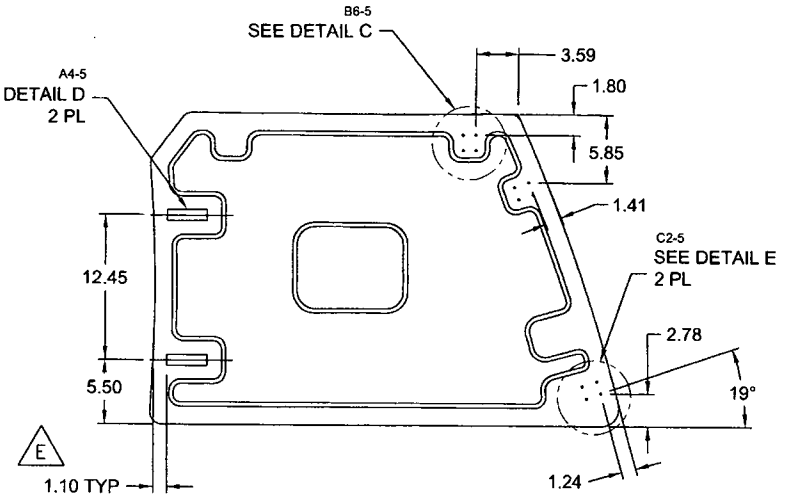
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries



D3186-1 SPACEPOD DOOR, LH
MAKE FROM D3186-1M



D3186-3 SPACEPOD DOOR, LH
MAKE FROM D3186-1M

RELEASED
2009 -09- 09

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 664595
11-02-22

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: N/A

REV.	DESCRIPTION	BY	DATE
E	DRAWING UPDATED TO CURRENT STANDARDS. 1.10 WAS 0.98 (ZN B5-1, B4-1, B7-2, B1-2); R0.12 WAS 0.125 (ZN B5-5); REF PAR 09-026	RF	09.07.08
D	UPDATE DIMENSIONS	LE	07.02.22
C	REMOVED D0600-XXX LABELS	LE	06.12.13
B	DIMS UPDATED TO MATCH PRODUCT FOAM PATTERN UPDATED D3186-1M/-2M/-3/-4 ADDED	LE	06.09.25
A	NEW ISSUE	CP	03.03.27

DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3186	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SPACEPOD DOOR	NTS
DATE	09.07.08		

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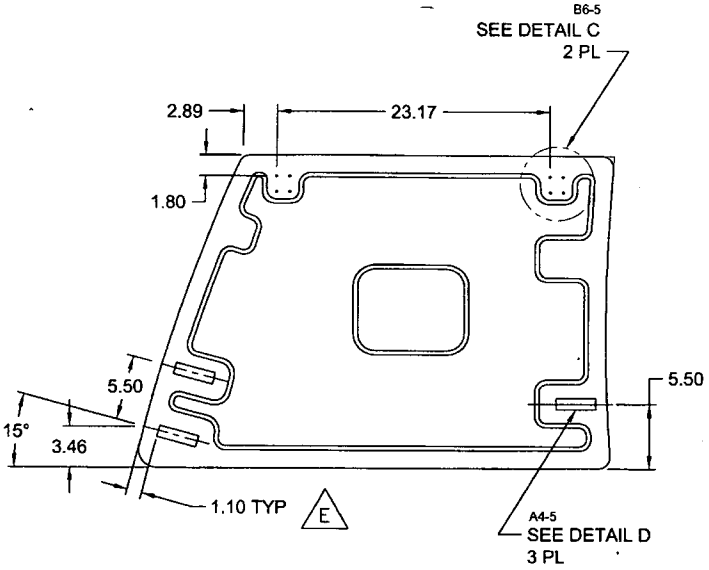
W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

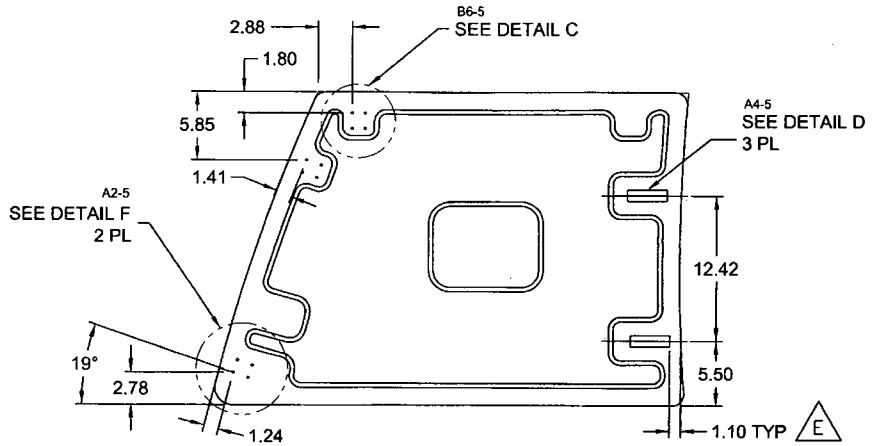
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries



D3186-2 SPACEPOD DOOR, RH
MAKE FROM D3186-2M



D3186-4 SPACEPOD DOOR, RH
MAKE FROM D3186-2M

w/o 46598

RELEASED
2009 -09- 09

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: N/A

DESIGN	DS	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED		DRAWING NO. D3186 — REV. E — SHEET 2 OF 5
MFG. APPR.		
APPROVED		TITLE: SPACEPOD DOOR — SCALE: NTS
DE APPR.		
DATE	09.07.08	

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

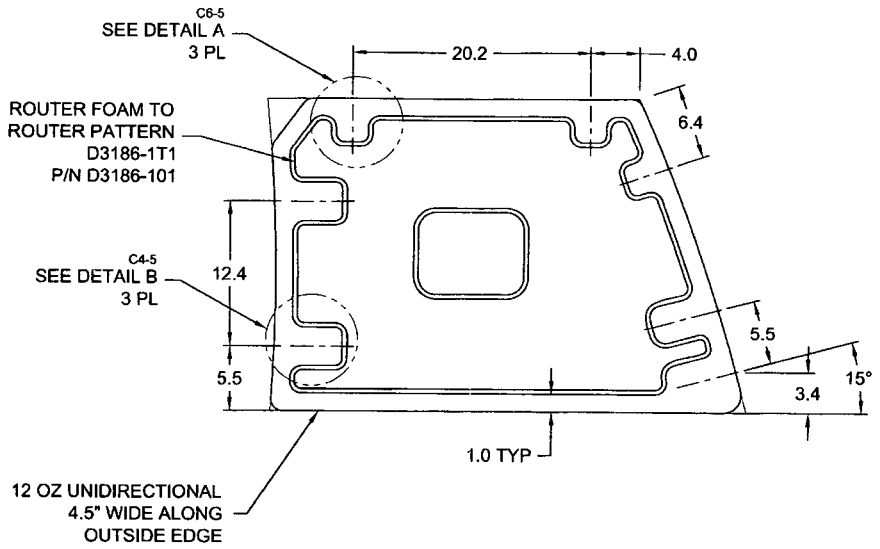
Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

MAIN LAYUP
9 OZ SATIN (9 SQ FEET)
9 OZ SATIN (9 SQ FEET)
FOAM
9 OZ SATIN (9 SQ FEET)
12 OZ UNIDIRECTIONAL
9 OZ SATIN (9 SQ FEET)
RESIN (35-45% BY WEIGHT)
PEEL PLY



D3186-1M SPACEPOD DOOR AS MOLDED

RELEASED
2008 -08- 08

NOTES:
1) MATERIAL:
RESIN = EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40
FOAM = 3/8", A500 CORE-CELL OR DIVINYCELL OR AIREX OR KLEGECELL
FIBRE = 9.7 OZ 7781 WEAVE "S" GLASS ("9 OZ SATIN")
12 OZ UNIDIRECTIONAL FIBERGLASS ("12 OZ UNIDIRECTIONAL")
LAMINATE PER DART QSI 006 4.0
LAMINATION SCHEDULE PER THIS DRAWING
2) FINISH: FINISH INSIDE/OUTSIDE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 7.0 lbs
8) USE MOLD DT8005 FOR DOOR LAYUP

wb66588

DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3186	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SPACEPOD DOOR	NTS
DATE	09.07.08		

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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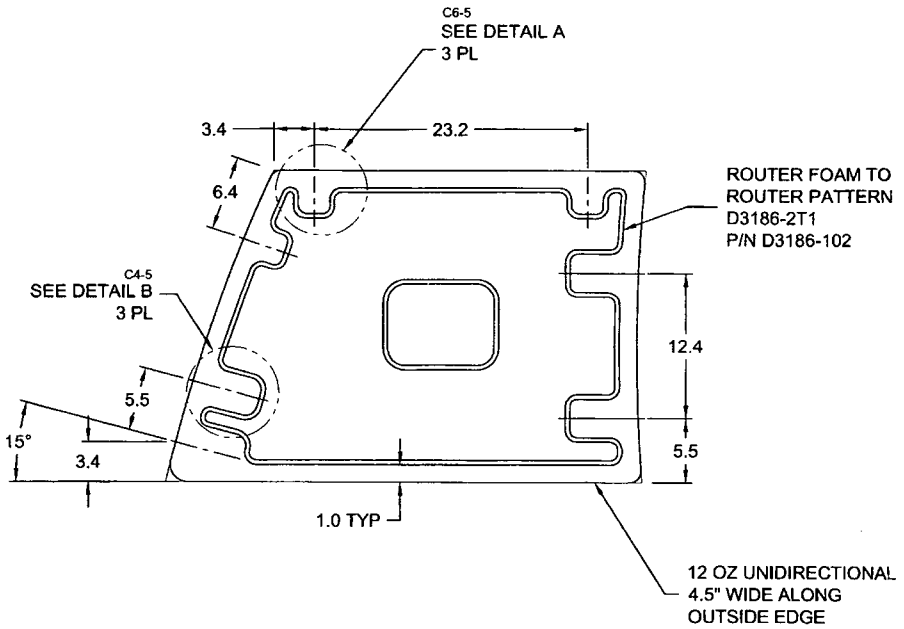
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

MAIN LAYUP
9 OZ SATIN (9 SQ FEET)
9 OZ SATIN (9 SQ FEET)
FOAM
9 OZ SATIN (9 SQ FEET)
12 OZ UNIDIRECTIONAL
9 OZ SATIN (9 SQ FEET)
RESIN (35-45% BY WEIGHT)
PEEL PLY



NOTES:
1) MATERIAL:
RESIN = EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40
FOAM = 3/8", A500 CORE-CELL OR DIVINYCELL OR AIREX OR KLEGECELL
FIBRE = 9.7 OZ 7781 WEAVE "S" GLASS ("9 OZ SATIN")
12 OZ UNIDIRECTIONAL FIBERGLASS ("12 OZ UNIDIRECTIONAL")
LAMINATE PER DART QSI 006 4.0
LAMINATION SCHEDULE PER THIS DRAWING
2) FINISH: FINISH INSIDE/OUTSIDE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 7.0 lbs
8) USE MOLD DT8006 FOR DOOR LAYUP

D3186-2M SPACEPOD DOOR AS MOLDED

w/o 66595

RELEASED
2008 -08- 09

DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3186	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SPACEPOD DOOR	NTS
DATE	09.07.08		

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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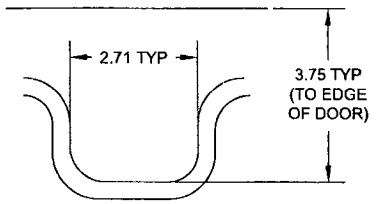
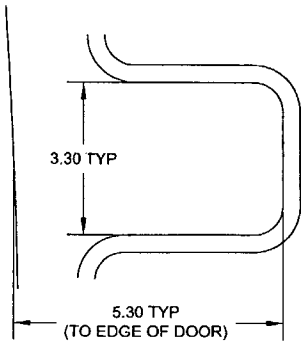
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

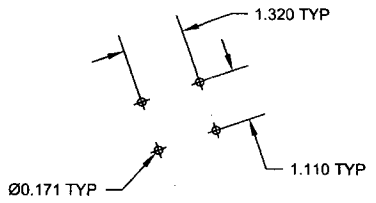
NOTE: Date & initial all entries



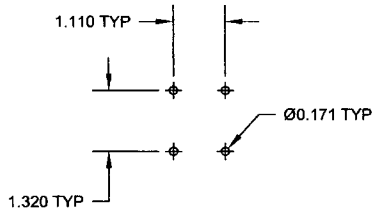
DETAIL A D6-3 D4-4
SCALE 4X



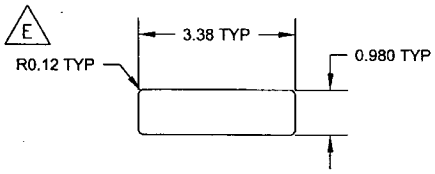
DETAIL B C6-3 C6-4
SCALE 4X



DETAIL E C1-1
SCALE 4X

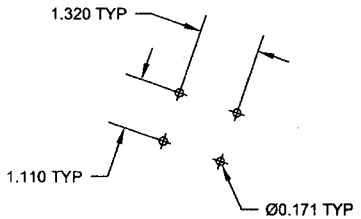


DETAIL C D7-1 D3-1 D6-2 D3-2
SCALE 4X



NOTE: ENSURE THAT CUTOUT IS
PERPENDICULAR TO EDGE OF DOOR

DETAIL D C5-1 D4-1 B6-2 C2-2
SCALE 4X



DETAIL F C4-2
SCALE 4X

RELEASED
2009 -09- 09

w/o 64585

DESIGN	DS	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3186	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SPACEPOD DOOR	NTS
DATE	09.07.08		

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries